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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/825,086  | 04/15/2004  | Shin Matsuda         | 81716.0123          | 7174             |
| 26/021 7590 08/14/2008<br>HOGAN & HARTSON LLP.<br>1999 AVENUE OF THE STARS<br>SUITE 1400<br>LOS ANGELES, CA 90067 |             |                      |                     |                  |
| EXAMINER<br>MENON, KRISHNAN S   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 1797  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 08/14/2008  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/825,086

**Applicant(s)**

MATSUDA ET AL.

**Examiner**

Krishnan S. Menon

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.  
4a) Of the above claim(s) 1-24 and 30-39 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 25-29 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :2/7/08, 12/3/07, 8/30/07, 7/13/07, 7/5/07, 8/1/05, 5/20/04.

### **DETAILED ACTION**

Claims 25-29 are active as amended and pending, and claims 1-24 and 30-39 are withdrawn from consideration as of 7/8/08.

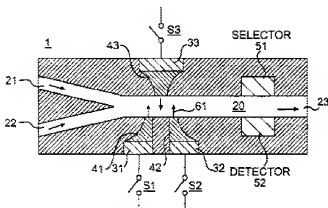
#### ***Claim Rejections - 35 USC § 102/103***

1. Claims 25,27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Yasuda, et al., (US 6,244,738).

Claim 25 recites a channel with plurality of supply portions connected to the channel and the channel having a vibrating element at or near the where the supply portions are connected. Limitations regarding the flow of the fluids and being subjected to a predetermined treatment are intended use of the device.

Yasuda teaches a channel (20) with supply channels (21) and (22) and an ultrasonic vibrator at (61) - see fig 2. The two supply channels would be 'plurality', meaning 2 or more. There is also a collection portion – outlet (23) of the channel. See also the abstract and claims. Applicant defines the collection portion as outlet (55) in figure 13A, the elected species.

Fig 2 of Yasuda is reproduced below. Acoustic horns are arranged symmetrically along the walls of the channels so that ultrasonic energy is directly delivered to the channel fluids. See column 2, lines 46-56. This anticipates the claim language "vibrating element ..provided on a surface of the channel in a vicinity...".



2. Claims 25-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Cosby et al (US 2003/0107946).

Cosby teaches a device (see figure 7) having a channel (116) with a substrate (112) and cover (114), plurality of entry channels (122, 124 – two is plural), with a pumping chamber at the junction of the entry channel and the channel (116), the top cover on the pumping channel having a vibrator (see paragraphs 35 and 36) so that the cover (114) over the chamber (136) vibrates. The reference also teaches a collection portion, that is an outlet, (142), and a serpentine portion (138) for any pre-determined treatment.

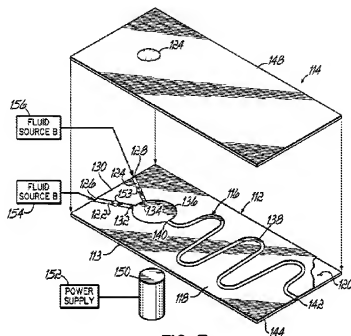


FIG. 7

"The cover 114 is sufficiently thin that the area over the chamber 136 vibrates or oscillates and flexes with the oscillations of the magnetic field. In some applications, the cover 114 can be etched or scored to facilitate a flexing of the area of the cover 114 over the chamber 136."

The above quoted excerpts from paragraph 0036 of the reference teaches that the vibration is directly provided into the vicinity of the channel inlets – chamber 136.

3. Claims 26 and 28 are rejected under 35 USC 103(a) as being unpatentable over Yasuda.

Claims differ from the teaching of the reference in having the vibrator on the cover. Reference appears to have vibrator on the substrate, but also teaches that the vibrator is symmetrical around the channel. However, this difference is not patentable

because the structure taught by the reference is equivalent, performing the same function in substantially the same way as claimed, and the location/orientation of the vibrator with respect to the channel is of design convenience.

### ***Response to Arguments***

Arguments are persuasive – the references teach the added limitation as shown.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797